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TITLE: Eyelash make-up composition based on wax and keratin hydrolysate

#### Abstract Paragraph Left (1):

The <u>wax</u>-based <u>mascaras</u> containing keratin hydrolysates having a molecular weight greater than 50,000 have improved properties for coating eyelashes, of stability and eyelash lengthening.

#### Brief Summary Paragraph Right (3):

The mascaras used are generally <u>wax</u>-based. However, it has been observed that when <u>waxes</u> alone are used, a non-homogeneous film is obtained after application on the eyelashes which forms cracking flakes immediately after drying. To overcome this disadvantage, it has been proposed to add various additives to the <u>wax</u>. By the addition of a thickening agent, such as hydroxyethylcellulose, the homogeneity of the film deposited on the eyelashes is improved. However, the stability of this film is not sufficient because cracking flakes appear after a few hours. Moreover, the lengthening of the eyelashes is inadequate.

#### Brief Summary Paragraph Right (4):

It has also been proposed to add to the mixture of  $\underline{wax}$  and thickening agent a cohesion agent, such as colophony and its derivatives.

#### Brief Summary Paragraph Right (5):

Mascaras are also known which are based on mixtures of  $\underline{waxes}$  and anionic and cationic polymers.

## Brief Summary Paragraph Right (7):

U.S. patent application Ser. No. 799,496 describes mascaras containing  $\underline{\text{waxes}}$  and derivatives of sulfonated keratin having the formula: ##STR1## wherein: K represents the keratin residue;

## Brief Summary Paragraph Right (10):

The object of the present invention, therefore, is a composition for eyelash make-up, or mascara, comprising, in a cosmetically acceptable support, at least one  $\underline{wax}$  having a melting point of between 60.degree. and 110.degree. C., characterized by the fact that it contains at least one keratin hydrolysate having an average molecular weight of between 50,000 and 200,000, with the weight ratio of the quantity of keratin hydrolysate used to the quantity of  $\underline{wax}(es)$  used being between 0.005 and 0.5.

# Brief Summary Paragraph Right (18):

In general, the <u>waxes</u> selected have a melting point of between 60.degree. and 110.degree. C. and a needle penetration, at 25.degree. C., of 3 to 40, as measured in accordance with U.S. Standard ASTM D5 or in accordance with French Standard NFT 004. The principle of the measurement of the penetration of a needle in accordance with Standards ASTM D5 and NFT 004 consists of measuring the depth, expressed in tenths of millimeters to which a standardized needle (weighing 2.5 g placed in a needle-holder weighing 47.5 g, or a total of 50 g) penetrates when placed on the <u>wax</u> for 5 seconds.

## Brief Summary Paragraph Right (19):

The <u>waxes</u> used in accordance with the invention are selected from among the animal <u>waxes</u>, the vegetable <u>waxes</u>, the mineral <u>waxes</u>, the synthetic <u>waxes</u> and the various fractions of natural <u>waxes</u>, with all <u>such waxes</u> having the two characteristics indicated above.

# Brief Summary Paragraph Right (20):

Among the animal  $\underline{waxes}$ , beeswaxes, lanolin  $\underline{waxes}$  and China insect  $\underline{waxes}$  can be mentioned.

### Brief Summary Paragraph Right (21):

Among the vegetable waxes, Carnauba waxes, Candelilla waxes, Ouricurry waxes, cork fiber waxes, sugar cane waxes and Japan waxes can be mentioned.

#### Brief Summary Paragraph Right (22):

For the mineral  $\underline{waxes}$ , paraffins, microcrystalline  $\underline{waxes}$ . Nontan  $\underline{waxes}$  and ozocerites in particular can be mentioned.

#### Brief Summary Paragraph Right (23):

For the synthetic <u>waxes</u>, polyethylene <u>waxes</u>, the <u>waxes</u> obtained by the Fisher and Tropsch synthesis and the waxy copolymers as well as their esters can in particular be mentioned.

#### Brief Summary Paragraph Right (24):

These <u>waxes</u> are well known in the art. In accordance with the invention the  $\underline{wax}(es)$  is (are) present in the mascara compositions in amounts of between 2 and 40% by weight in relation to the total weight of the composition.

# Brief Summary Paragraph Right (25):

The  $\underline{\text{waxes}}$  which can be used in accordance with the present invention are preferably solid and rigid at a temperature of less than 50.degree. C.

#### Brief Summary Paragraph Right (26):

The mascara compositions in accordance with the present invention can contain pigments in addition to the keratin hydrolysate and the <u>waxes</u>. Due to the presence of the above-identified keratin hydrolysates, good distribution of said pigments in the compositions is obtained as is an improvement in their fixing on the eyelashes.

# Brief Summary Paragraph Right (32):

The composition in accordance with the present invention can in particular be in the form of oil-in-water or water-in-oil <u>emulsions</u>, or in the form of suspensions in a solvent medium, or even in an anhydrous solid or paste. The methods for the preparation of these various types of compositions are well known to the skilled artisan.

#### Brief Summary Paragraph Right (33):

When they are used in the form of <u>emulsions</u>, the compositions can contain tensio-active agents which are well known in the art.

# Brief Summary Paragraph Right (34):

A particularly preferred embodiment consists of preparing anionic or non-ionic <u>emulsions</u> using anionic or non-ionic tensio-active agents in amounts preferably between 2 and 30% by weight in relation to the total weight of the composition.

#### Brief Summary Paragraph Right (50):

The non-ionic <u>emulsions</u> are principally composed of a mixture of oil an/or fatty alcohol, or polyethoxylated or polyglycerolated alcohols, such as polyethoxylated stearylic or cetylstearylic alcohols.

#### Brief Summary Paragraph Right (51):

The anionic emulsions are preferably constituted from amine stearates.

# Brief Summary Paragraph Right (53):

The thickeners which can be used can be natural or synthetic. Among the natural thickeners, <u>gums</u> of various sorts, such as <u>gum</u> Arabic, guar or carob <u>gum</u> can be mentioned. Among the synthetic thickeners, <u>cellulose</u> derivatives such as hydroxyethylcellulose, carboxymethylcellulose, starch derivatives, <u>cellulose</u> ether derivatives having quaternary ammonium groups, cationic polysaccharides, <u>acrylic</u> or methacrylic <u>polymer</u> salts, polyenes or polysiloxanes can be mentioned.

# Brief Summary Paragraph Right (56):

The present invention also relates to a method of manufacture of a composition in accordance with the invention consisting of combining a cosmetically acceptable support with a wax having a melting point of between 60.degree. and 110.degree. C. and a keratin hydrolysate having an average molecular weight of between 50,000 and 200,000, with the ratio by weight of the quantity of keratin hydrolysate used to the

quantity of wax(es) used being between 0.005 and 0.5.

## Detailed Description Paragraph Right (3):

It was used in the form of a solution containing 14% <u>protein</u> hydrolysate, 15% propyleneglycol, 3% NaCl and 67% water, with a pH of 5-7.

# <u>Detailed Description Paragraph Right</u> (6):

The <u>waxes</u> were heated to 80.degree. C. The talc and the pigments were added. The montmorillonite which had been modified with an organic substance and part of the isoparaffin were then incorporated. At approximately 40.degree. C., the keratin hydrolysate, the ethyl alcohol and the remainder of the isoparaffin were added. The mixture was passed through a grinder.

# <u>Detailed Description Paragraph Right</u> (8):

The following Examples 2 to 7 relate to mascara compositions in <a href="emulsion">emulsion</a> form. These mascaras are ready for use. The general method was the following:

## <u>Detailed Description Paragraph Right</u> (9):

The <u>waxes</u> were melted. The pigments were incorporated. The aqueous phase containing, depending on the case, the <u>gums</u> and/or the hydroxyethylcellulose and the keratin hydrolysate were heated to the same temperature as the <u>wax</u> phase. The two phases were mixed and vigorously stirred.

## <u>Detailed Description Paragraph Right</u> (19):

The <u>waxes</u> were melted. The pigments were added. The <u>gum</u> Arabic and the keratin hydrolysate were incorporated. The mixture was passed through a heating grinder. The remaining ingredients were added. The entire mixture was again melted and poured into molds while stirring lightly.

## <u>Detailed Description Paragraph Table</u> (2):

Carnauba wax 5 g Candelilla wax 5 g Ethyl alcohol 3 g Montmorillonite modified with an organic substance 4 g Keratin hydrolysate (calculated by dry weight) 0.3 g Talc 10 g Black iron oxide 10 g Isoparaffin quantity sufficient for 100 g

## <u>Detailed Description Paragraph Table</u> (3):

Triethanolamine stearate 15 g Beeswax 8 g Paraffin 3 g Colophony 2 g Ozocerite 10 g Propyl parahydroxybenzoate 0.20 g Methyl parahydroxybenzoate 0.20 g Gum Arabic 0.50 g Keratin hydrolysate (calculated by dry weight) 0.15 g Black iron oxide 5 g Aluminosilicate polysulfide 5 g Water quantity sufficient for 100 g

# <u>Detailed Description Paragraph Table</u> (4):

2-amino 2-methyl 1-propanol stearate 25 g
Candelilla wax 5 g Beeswax 8 g Methyl parahydroxybenzoate 0.15 g Propyl
parahydroxybenzoate 0.15 g Carob gum 3 g Xanthan gum 3 g Keratin hydrolysate
(calculated by dry weight) 0.08 g Black iron oxide 8 g Water quantity sufficient for

# <u>Detailed Description Paragraph Table</u> (5):

Triethanolamine stearate 20 g Microcrystalline wax 5 g Carnauba wax 10 g Beeswax 3 g Urea imidazolidinyl 0.30 g Propyl parahydroxybenzoate 0.15 g Tragacanth gum 5 g Keratin hydrolysate (calculated by dry weight) 0.60 g Black iron oxide 5 g Water quantity sufficient for 100 g

## <u>Detailed Description Paragraph Table</u> (6):

Triethanolamine stearate 15 g <u>Candelilla wax</u> 8 g <u>Carnauba wax</u> 10 g Hydroxyethylcellulose 0.9 g Keratin hydrolysate (calculated by dry weight) 0.75 g Black iron oxide 8 g Methyl parahydroxybenzoate 0.15 g Propyl parahydroxybenzoate 0.15 g Water quantity sufficient for 100 g

# Detailed Description Paragraph Table (7):

Triethanolamine stearate 10 g <u>Candelilla wax</u> 15 g Beeswax 17 g Xanthan <u>gum</u> 1 g Keratin hydrolysate (calculated by dry 0.15 g weight) Black iron oxide 5 g Aluminosilicate polysulfide (ultramarine 4 g blue) Preservative sufficient quantity Water quantity sufficient for 100 g

| Detailed | Description | Paragraph | Table | (8) . |
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Triethanolamine stearate 10 g Carnauba wax 8 g Beeswax 8 g Keratin hydrolysate (calculated by dry 1 g weight) Black iron oxide 5 g Aluminosilicate polysulfide 4 g Preservative sufficient quantity Water quantity sufficient for 100 g

| Detailed Description Paragraph Table (9):   |
|---|
| Triethanolamine stearate 25 g Beeswax 6 g   |
| Microcrystalline wax 22 g Saturated fatty acid glycerides 11 g Methyl               |
| parahydroxybenzoate 0.15 g Propyl parahydroxybenzoate 0.15 g Gum Arabic 5.70 g      |
| Keratin hydrolysate (calculated by dry weight) 0.25 g Red iron oxide 5 g Black iron |
| oxide 5 g   |

#### CLAIMS:

- 1. An eyelash makeup composition comprising in a cosmetically acceptable support at least one wax having a melting point between 60.degree. and 110.degree. C. and at least one keratin hydrolyzate having an average molecular weight ranging from 50,000 to 200,000, the weight ratio of the amount of said keratin hydrolyzate to the amount of said wax ranging from 0.005 to 0.5.
- 4. The composition of claim 1 wherein said  $\underline{wax}$  is an animal  $\underline{wax}$ , a vegetable  $\underline{wax}$ , a mineral wax, a synthetic wax or fraction of a natural wax, or a mixture thereof.
- 5. The composition of claim 4 wherein said animal wax is selected from the group consisting of beeswax, lanolin wax and China insect wax.
- 6. The composition of claim 4 wherein said vegetable wax is selected from the group consisting of Carnauba wax, Candelilla wax, Ouricurry wax, cork fiber wax, sugar cane wax and Japan wax.
- 7. The composition of claim 4 wherein said mineral wax is selected from the group consisting of paraffin, microcrystalline wax, Montan wax and ozokerite.
- 8. The composition of claim 4 wherein said synthetic wax is selected from the group consisting of polyethylene wax, wax obtained by Fischer-Tropsch synthesis and a wax copolymer and esters thereof.
- 9. The composition of claim 1 wherein said wax is present in an amount ranging from 2 to 40 percent by weight based on the total weight of said composition.
- 16. The composition of claim 1 in the form of an oil-in-water emulsion, a water-in-oil emulsion, a suspension in a solvent medium, an anhydrous solid or an anhydrous paste.
- 18. The composition of claim 1 which also includes at least one of a softener, a preservative, a sequestering agent, a perfume, a thickener, an oil, a silicone, a cohesion agent, a polymer, an alkalizing agent or an acidifying agent.
- 19. A method for preparing the composition of claim 1 comprising combining a cosmetically acceptable support with a wax having a melting point ranging from 60.degree. to 110.degree. C. and a keratin hydrolyzate having an average molecular weight ranging from 50,000 to 200,000, the weight ratio of the amount of said keratin hydrolyzate to the amount of said wax ranging from 0.005 to 5.